VIDYA
COLLEGE OF ENGINEERING
AKTU CODE : 229

TECHWIZ'2k19

ACCEL-R8 2.0 (ROBO-RACE)

Objective:-

To design a manually controlled ROBOT that has capacity to cover maximum distance in shortest possible time, challenging the hurdles and be one of the best opponents.

CHALLENGE:-

"More speed, more power with minimum time"

ROBOT SPECIFICATIONS:-

1) The maximum dimension of the robot can be **30 x 25 cm (l x b)**.

2) The robot may be wired or wireless.

3) The length of the wire (for wired bots) should be long enough to cover the whole track and wire should remain slack during the complete run.

4) Max weight must not exceed 6 kg including battery.

5) The power supply will be provided maximum up to 12Volt.

6) Readymade toys car are not allowed.

RULES AND REGULATIONS:-

The competition is all about autonomous racing robots. The event focuses on improving the driving ability of autonomous robots, through more realistic race conditions.

1) Robot should be as per the given specifications.
2) Each team can have maximum four members.
3) Each member of the team must contain the identity card of his/her respected institute.
4) The robot should not damage the arena. However there is no penalty, if side flags are broken by the robot. Also Hand touches are allowed with penalty of 10 seconds.
5) The robot must not leave behind any of its parts during the run; else it will result in 10 sec penalty.
6) Maximum time allotted for each team to complete their race is 5 minutes.
7) You need to end the race with the front part of your robot touching the end lines first.
8) If your robot will go outside the arena, but it is not dropped from track, then there is no penalty.

9) If any hurdle would not be cleared by the robot during the event and team wants to place their robot after the hurdle then they are allowed to do so with penalty of upto 30 seconds.

10) Unethical behavior could lead to disqualification. Faculty-coordinators have all the rights to take final decision for any matter during the event.

11) Judge's decision will be considered final.

12) Certificates will be given to all the participants.

*Rules may subject to change.

ARENA:-

1) Track width is 28 cm (minimum).

2) The track surface and course line may have unevenness.

3) There might be abrupt angles.

4) There will be certain obstacles in the race track which will try to slow down the robot.

5) Major changes will be notified on the website.

6) Arena may consist of speed breakers, marble pit, slippery path, rotating disc, curve ramp down, seesaw, slotted ramp etc.

PHASES IN THE EVENT:-

1) The competition is based on time trail system. The one who covers maximum distance in minimum time will be winner.

2) Hand touches are allowed with penalty of 10 seconds. For each hand touch, penalty time will be added further too overall time required by robot for completion of specified round.

3) If any of the robots starts off before start up call, the counter would be restarted and the machines will get a second chance. If repeated again then team will be disqualified.

4) If any hurdle would not be cleared by the robot during the event and team wants to place their robot after the hurdle then they are allowed to do so with penalty of upto 30 seconds.
5) Your robot must be ready when call is made for your team.
6) Decision about your robot will be taken by the judges.

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